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10/689,559	10/20/2003	Gerald R. Malan	A0781-701810	8394

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EXAMINER	
GOODCHILD, WILLIAM J	

ART UNIT	PAPER NUMBER
2445	

NOTIFICATION DATE	DELIVERY MODE
11/12/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/689,559	MALAN ET AL.	
	Examiner	Art Unit	
	WILLIAM J. GOODCHILD	2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 August 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,5,7,10,13-16 and 19-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4-5, 7, 10, 13-16 and 19-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 4-5, 7, 10, 13-16 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hrabik et al., (US Publication No. 2002/0178383), (hereinafter Hrabik), and further in view of Albitz et al., (DNS and BIND), (hereinafter Albitz).

Regarding claim 1, Hrabik discloses determining a first mapping in a domain naming system [Hrabik, paragraph 69, lines 4-7], the act of determining the first mapping comprising an act of obtaining an authoritative mapping from an authoritative source [Hrabik, paragraph 69];

determining a second mapping in the domain naming system [Hrabik, paragraph 69], the act of determining a second mapping comprising acts of querying a nameserver of the list of nameservers to be queried and receiving a response from the nameserver, the response containing the second mapping [Hrabik, paragraph 69], wherein the first mapping is a first namespace mapping that maps a first name to a first resource and the

second mapping is a second namespace mapping that maps a second name to a second resource [Hrabik, paragraph 69];

comparing the first mapping to the second mapping [Hrabik, paragraph 69] and

identifying at least one discrepancy between the first and second mapping [Hrabik, paragraphs 15 and 29]; and

generating and sending an alert message to a user, the alert message indicating the at least one discrepancy between the first and second mapping [Hrabik, paragraphs 15, 29 and 69].

Hrabik does not specifically disclose compiling a list of nameservers to be queried comprising acts of:

sending a namespace mapping resolution query to a plurality of network nodes;

waiting for one or more responses from the plurality of network nodes;

determining whether a network node in the plurality of network nodes is a nameserver based on a format of one or more responses received from the network node; and

if the network node is a nameserver, adding the network node to the list of nameservers to be queried.

However, Albitz discloses creating a list of nameservers [Albitz, page 220, Zone Transfers, 1st paragraph and page 220, Zone Transfers, paragraph 3, lines 2-3].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate creating a list of nameservers in order to assist in the testing of name resolution and allow for maintaining records of nameservers to check / verify again.

Albitz further discloses sending a namespace mapping resolution query to a plurality of network nodes [Albitz, page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls –t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver];

waiting for one or more responses from the plurality of network nodes [Albitz, page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls –t any movie.edu > /tmp/movie – List all data into /tmp/movie', after typing in the request, the response will print out on screen or to a file as requested in this example, from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver];

determining whether a network node in the plurality of network nodes is a nameserver [Albitz, page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls –t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver] based on a format of one or more responses received from the network node [Albitz, page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls –t any movie.edu > /tmp/movie – List all data into /tmp/movie',

from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver]; and

if the network node is a nameserver, adding the network node to the list of nameservers to be queried [Albitz, page 220, Zone Transfers, 1st paragraph and page 220, Zone Transfers, paragraph 3, lines 2-3].

Regarding claim 4, Hrabik-Albitz further discloses the authoritative source is at least one of: an authoritative nameserver; and a database storing a plurality of authoritative mappings [Hrabik, paragraph 69, lines 3-7].

Regarding claim 5, Hrabik-Albitz further discloses an act of reporting the at least one discrepancy to a user [Hrabik, paragraphs 15, 29 and 69].

Regarding claim 7, Hrabik-Albitz further discloses the first namespace mapping is stored on an authoritative nameserver and the act of determining a first mapping comprises an act of obtaining the first mapping from the authoritative nameserver [Hrabik, paragraph 69].

Regarding claim 10, Hrabik-Albitz further discloses the act of querying a nameserver comprises an act of requesting at least one namespace mapping record from the nameserver [Hrabik, paragraph 69].

Regarding claim 13, Hrabik-Albitz further discloses the act of determining comprises an act of determining that a network node in the plurality of nodes is not a nameserver if the network node does not respond to the namespace mapping resolution query [Albitz, page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls –t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver].

Regarding claim 14, Hrabik-Albitz further discloses the act of compiling a list of at least one nameserver comprises an act of: listening for a request from a non-authoritative nameserver to an authoritative nameserver [Albitz, page 217, paragraph 4, lines 1-4, 'When a BIND name server gets a query, it looks for the answer in its cache. If it doesn't have the answer, and it is authoritative for the domain, the name server responds that the name doesn't exist or that there is no data for that type.', paragraph 5, lines 4-6, When the name server receives a response from one of the remote name servers, it caches the response]; and when the request is detected, adding the non-authoritative nameserver to a list of nameservers, [Albitz, page 217, paragraph 5, lines 4-6, 'When the name server receives a response from one of the remote name servers, it caches the response', caching the response is adding the nameserver to a list of nameservers to use in the future].

Regarding claim 15, Hrabik-Albitz further discloses the request is a resolve request [Albitz, page 211, from nslookup routine, 'slate.mines.Colorado.edu.' provides a first mapping, from paragraph 1, this is an authoritative lookup].

Regarding claim 16, Hrabik-Albitz further discloses sending a namespace mapping resolution query to a plurality of network nodes [page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls –t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver] from a monitoring computer system that monitors namespace mapping violations [Hrabik, paragraphs 11 and 14];
waiting for one or more responses from the plurality of network nodes [page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls –t any movie.edu > /tmp/movie – List all data into /tmp/movie', after typing in the request, the response will print out on screen or to a file as requested in this example, from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver];
determining whether a network node in the plurality of network nodes is a nameserver [page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole

zone using the ls command', page 221, line 26, '> ls –t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver]; and

storing, in a storage device in the monitoring computer system, an indication that the network node is a nameserver in response to the act of determining [page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls –t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver], the indication of the network node being stored in a list of nameservers to be queried by the monitoring computer system to determine namespace mapping violations [Hrabik, paragraphs 15, 29 and 69];

determining a first mapping in a domain naming system, the act of determining the first mapping comprising an act of obtaining an authoritative mapping from an authoritative source [Hrabik, paragraph 69];

determining a second mapping in the domain naming system, the act of determining a second mapping comprising acts of querying a nameserver of the list of nameservers to be queried and receiving a response from the nameserver, the response containing the second mapping, wherein the first mapping is a first namespace mapping that maps a first name to a first resource and the second mapping is a second namespace mapping that maps a second name to a second resource [Hrabik, paragraph 69];

comparing the first mapping to the second mapping and identifying at least one discrepancy between the first and second mapping [Hrabik, paragraphs 15, 29 and 69];

generating and sending an alert message to a user, the alert message indicating the at least one discrepancy between the first and second mapping [Hrabik, paragraphs 15, 29 and 69].

Regarding claim 19, Hrabik-Albitz further discloses listening for a request from a non-authoritative nameserver to an authoritative nameserver [Albitz, page 217, paragraph 5, lines 4-6, When the name server receives a response from one of the remote name servers, it caches the response];

when the request is detected, adding the non-authoritative nameserver to a list of nameservers [Albitz, page 217, paragraph 5, lines 4-6, When the name server receives a response from one of the remote name servers, it caches the response]; and

storing the list of nameservers in a memory of a monitoring computer system [Albitz, page 217, paragraph 5, lines 4-6, When the name server receives a response from one of the remote name servers, it caches the response], the list of nameservers to be queried by the monitoring computer system to determine namespace mapping violations [Hrabik, paragraphs 15, 29 and 69];

determining a second mapping in the domain naming system, the act of determining a second mapping comprising acts of querying a nameserver of the list of nameservers to be queried and receiving a response from the nameserver, the response containing the second mapping, wherein the first mapping is a first namespace mapping that maps a

first name to a first resource and the second mapping is a second namespace mapping that maps a second name to a second resource [Hrabik, paragraph 69];

comparing the first mapping to the second mapping and identifying at least one discrepancy between the first and second mapping [Hrabik, paragraphs 15, 29 and 69];

generating and sending an alert message to a user, the alert message indicating the at least one discrepancy between the first and second mapping [Hrabik, paragraphs 15, 29 and 69].

Regarding claim 20, Hrabik-Albitz further discloses the request is a resolve request [Albitz, page 211, from nslookup routine, 'slate.mines.Colorado.edu.' provides a first mapping, from paragraph 1, this is an authoritative lookup].

Regarding claim 21, Hrabik-Albitz further discloses a detector adapted to determine a first mapping and a second mapping [Hrabik, paragraph 69] wherein the detector is further adapted to compare the first mapping to the second mapping [Hrabik, paragraph 69] and to identify at least one discrepancy between the first mapping and second mapping [Hrabik, paragraphs 15 and 29], wherein the detector is configured to obtain an authoritative mapping from an authoritative source and store the authoritative mapping in a database [Hrabik, paragraphs 44 and 69];

a discoverer adapted to discover at least one nameserver among a plurality of network nodes [Albitz, page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls –t any movie.edu

> /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver];

a database configured to store the first mapping and the second mapping [Hrabik, paragraphs 44 and 69] and a list of a plurality of discovered nameservers [Hrabik, paragraphs 44 and 69], including the at least one nameserver, wherein the detector is configured to query the at least one nameserver [Hrabik, paragraph 69], and

store the second mapping contained within a response received from the nameserver [Albitz, page 217, paragraph 5, lines 4-6, When the name server receives a response from one of the remote name servers, it caches the response],

wherein the discoverer is adapted to send a namespace mapping resolution query to a plurality of network nodes [Hrabik, paragraph 69], wait for one or more responses from the plurality of network nodes [Hrabik, paragraph 69], determine whether a network node in the plurality of network nodes is a nameserver based on a format of one or more responses received from the network node [Hrabik, paragraph 69], and if the network node is a nameserver, storing the network node to the list of nameservers to be queried [Hrabik, paragraph 69]; and

a component adapted to generate an alert message and send the alert message to a user, the alert message indicating the at least one discrepancy between the first mapping and the second mapping [Hrabik, paragraphs 15, 29 and 69].

Response to Arguments

3. Applicant's arguments filed 08/03/2009 have been fully considered but they are not persuasive.

A - Applicant argues "neither Hrabik or Albitz teach or suggest either: 'comparing the first mapping to the second mapping and identifying at least one discrepancy between the first and second mapping' or 'a detector further adapted to compare the first mapping to the second mapping and to identify at least one discrepancy between the first mapping and the second mapping'".

A – Hrabik discloses verifying www.company.com access the proper web site. It is obvious that in order to verify the name of the URL request, it is compared against an IP address that is known to be correct from the verifying system and tested against the IP address that the test is sent to [Hrabik, paragraph 69, lines 12-15]. Additionally, Hrabik discloses that when testing or discrepancies are found, that a message is sent to the master system [Hrabik, at least paragraphs 15, 24 and 29].

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Examiner's Note: Examiner has cited particular paragraphs / columns and line numbers in the reference(s) applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the cited passages as taught by the prior art or relied upon by the examiner.

Should applicant amend the claims of the claimed invention, it is respectfully requested that applicant clearly indicate the portion(s) of applicant's specification that support the amended claim language for ascertaining the metes and bounds of applicant's claimed invention

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM J. GOODCHILD whose telephone number is (571)270-1589. The examiner can normally be reached on Monday - Friday / 8:00 AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WJG
10/27/2009

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Supervisory Patent Examiner, Art Unit 2445